

2004 Consumer Confidence Report  
Annual Drinking Water Quality Report

2004 DRINKING WATER  
QUALITY REPORT\*  
CONSUMER CONFIDENCE REPORT

YOUR DRINKING WATER SOURCE

The City of Leominster is in Worcester County, Massachusetts. It lies entirely within the Nashua River basin. It is bounded by Fitchburg to the north, Lunenburg to the northeast, Lancaster to the southeast, Sterling to the south and Princeton and Westminster to the west. The city encompasses approximately 29.67 square miles of land of which 36 percent has been developed. Much of the western half of the city is part of state forest and municipal conservation areas. The conservation areas also include watershed lands.

The City of Leominster obtains its supplies through four local sources: the Distributing Reservoir system at Exchange Street, the Fallbrook Reservoir system at Wachusett Street, the NoTown Reservoir system at Route 2 East, and the Southeast Corner Wellfields at Jungle Road. Leominster also has an emergency connection to the Wachusett Reservoir at Rte 110. These systems are described in depth in appendix A as taken from a report prepared for the city by the firm of Camp, Dresser & McKee. A copy of this report can be obtained by contacting Mr. Matthew Marro at (978) 534-7524 ext 517.

In May of 1999, the City of Leominster completed a 4.5 Million-Dollar program to rehab the Fallbrook, NoTown, and Distributing Reservoir treatment systems. This capital improvement program has brought the system to compliance with the Safe Drinking Water Act, and has addressed issues brought about by DEP yearly sanitary surveys. These issues included storage of Chlorine, automated monitoring, and security of all of the facilities. The new facilities now have state of the art on line monitoring and chemical storage. The plants also possess security systems. More information on DEP sanitary surveys can be obtained by contacting Mr. Marro at the above listing or by email at mattmarro@cs.com.

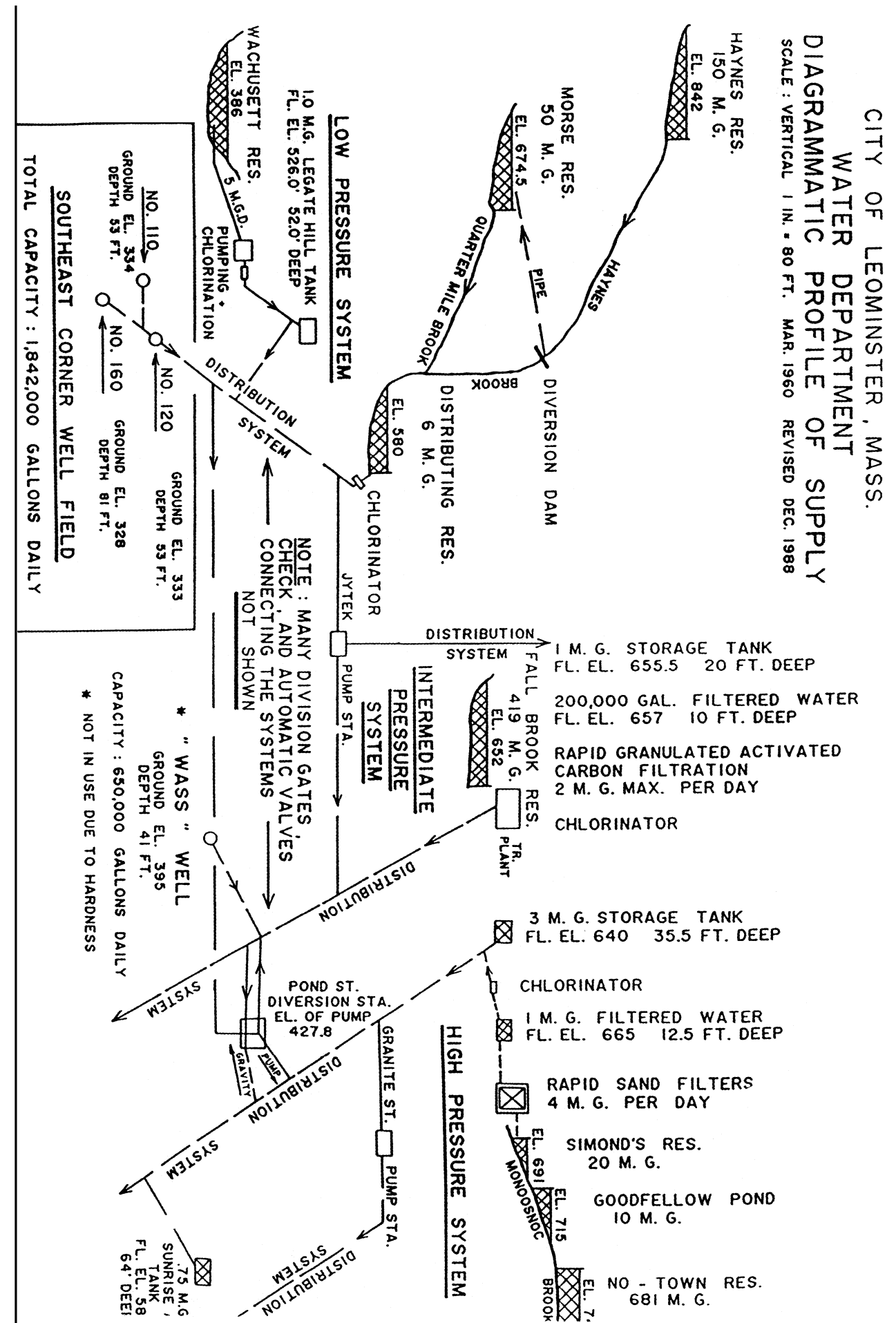
SUBSTANCES FOUND IN TAP WATER

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring mineral, and in some cases, radioactive material. It can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

City of Leominster  
Water Division  
109 Graham Street  
Leominster, MA 01453

PRESORT STD  
U.S. Postage  
PAID  
Ayer, MA  
Permit No. 9

The water Division also tested for Unregulated contaminants as required by the EPA. However, due to a technical problem the Data did not appear on the EPA website. The water division worked with the EPA to correct this technical problem and the issue was resolved. All samples were collected timely- this was simply a technical reporting problem.



# Lead in Drinking Water



**Health Affects of Lead**  
Lead is a common metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination - like dirt and dust - that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

**Lead in Drinking Water**  
Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

**How Lead Enters Our Water**  
Unlike most drinking water contaminants, lead is unusual in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

**Steps to Reduce Exposure to Lead in Drinking Water**  
Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water.

*The United States Protection Agency (EPA) and Leominster Water Division are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law we are required to have a program in place to minimize lead in your drinking water which is currently under review with Mass DEP. The following includes:* 1. Corrosion control treatment (treating the water to make it less likely that lead will dissolve into the water); 2. Source water treatment (removing any lead that is in the water at the time it leaves our treatment facility); and 3. A public education program. If you have any questions about how we are carrying out the requirements of the lead regulation please give us a call at 978-534-7588 ext 517. This information also explains the simple steps you can take to protect yourself by reducing your exposure to lead in drinking water.

Some local laboratories that can provide this service are listed at the bottom of this brochure. For more information on having your water tested, please call 978-534-7588 ext 517  
If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions:

**1. Flush Your System.**  
Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. Flushing usually uses less than one or two gallons of water and costs less than 10 cents per month. To flush, let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in your home's plumbing, the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush water to wash dishes or water plants. If you live in a high-rise building, letting the water flow before using it may not lessen your risk from lead. This is because high rise plumbing systems have more, and sometimes larger pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

**2. Use Only Cold Water for Cooking and Drinking.**  
Try not to cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove.

**3. Remove Loose Solder and Debris From Plumbing Materials.**  
Remove loose solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced. To do this, remove the faucet strainers from all taps and run the water from 3-5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

**4. Identify and Replace Lead Solder.**  
If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who did the work and

request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify your State

**5. Have an Electrician Check Your Wiring.**  
If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

**IF LEAD LEVEL PERSISTS**  
The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations in excess of 15 ppb after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

**6. Purchase or Lease A Home Treatment Device.**  
Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap. However, all lead reduction claims should be investigated. Be sure to check the actual performance of a specific treatment device before and after installing the unit.

**7. Purchase Bottled Water For Drinking and Cooking.**

**FOR MORE INFORMATION**  
You can consult a variety of sources for additional information: Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. State and local government agencies that can be contacted include: Leominster Water Division at 978-534-7588 ext 517 can provide you with information about your community's water supply, and a list of local laboratories that have been certified by EPA for testing water quality; and Leominster Health Department at 978-534-7533 ext 249 can provide you with information about the health effects of lead and how you can have your child's blood tested.

The following is a list of some State approved laboratories in your area that you can call to have your water tested for lead. Microbac Laboratories at 508-460-7600 of RI Analytical at 978-0568-0041

What should I do?

- **You need do nothing – The Water Division quickly came back into compliance. Sample collection and testing for the listed above has been performed and no standards were exceeded in either test.**

What does this mean?

This is not an immediate risk. If it had been, you would have been notified immediately.

What happened? What is being done?

The required tests were preformed by the Department upon being notified by the DEP. The problem was due to a mix-up with the scheduling. The Department added part time clerical staff to address reporting.

For more information, please contact Matthew S. Marro at 978-534-7524 ext 517 or [mmarro@DPW.leomnster-ma.gov](mailto:mmarro@DPW.leomnster-ma.gov) or Leominster water, 109 Graham Street, Leominster, Ma 01453.

## IMPORTANT DEFINITIONS

**Maximum Contaminant Level (MCL)** – the highest level of a contaminant that is allowed in drinking water.

**Maximum Contaminant Level Goal (MCLG)** – the level of a contaminant in drinking water below which there is no known or expected risk to health.

**Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.

**Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

The following definition is required if the Public Water System is under a variance or exemption: **Variances and Exemptions** – State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

\* You may refer to this report as an annual water quality report or a consumer confidence report.

**How are these sources protected?**  
The Department of Environmental Protection (DEP) has prepared a Source Water Assessment [Program](#) (SWAP) Report for the water supply source(s) serving [this](#) water system.

The SWAP Report notes the key issues activities in zone 1 and zone A, residential land uses, transportation corridors, hazardous materials storage, agricultural activities and golf courses, Oil or hazardous materials contamination sites and comprehensive well head protection planning in the water supply protection area for all of our water sources. The

report commends the water system on aggressive land acquisitions in the water supply protection district, installation of sanitary sewers, and the City of Leominster water divisions continued public education efforts

**What can be done to improve protection?**

The SWAP report recommends:

- Removal of non water supply activities in the zone A or zone 1 where feasible
- Continued public education
- Training and awareness activities with Emergency response personnel.
- Partner with Local business to ensure proper storage and handling of hazardous materials.
- Monitor progress on remedial action sites.
- Develop a well head protection plan.

*Leominster water plans to address the protection recommendations by:*

- *Continuing our work with local and state educational agencies to promote water supply awareness education*
- *Continued participation in the Local Emergency Planning Committee.*
- *Continued implementation of watershed and wellhead protection measures.*
- *Implement a watershed stream monitoring program.*

*Residents can help protect sources by:*

- *practicing good septic system maintenance,*
- *supporting water supply protection initiatives*
- *taking hazardous household chemicals to hazardous materials collection days,*
- *contacting the water department or Board of Health to volunteer for monitoring or education outreach to schools,*
- *Limiting pesticide and fertilizer use, etc.*

**Where can I see the SWAP Report?**

The complete SWAP report is available [at the Leominster Water Division and online at [www.state.ma.us/dep/brp/dws/](http://www.state.ma.us/dep/brp/dws/).

WATER QUALITY TESTING RESULTS							
CONTAMINANT	HIGHEST DETECT VALUE	RANGE DETECTED	AVERAGE DETECT	MCL	MCLG	VIOLATION (Y/N)	POSSIBLE SOURCE OF CONTAMINATION
Trihalomethanes	109.9 ppb	0-109.9 ppb	48.79 ppb	80	60	no	Chlorine by products.
Lead	73.0 ppb	0-73 ppb	16 ppb	15	10	Yes (action level only)	Solder in plumbing (not in source water ! )
Copper	7.90 mg/l	0-7.9 mg/l	0.020 mg/l	1.3	0.5	Yes	Same as above
Nitrate	0.20mg/l	0.00 - 0.20mg/l	0.01 mg/l	10.0	1.0	no	Fertilizers
Total Coliform	none	No detects	none	0	0	no	Bacteria form lack of disinfection or contamination.
Inorganics :							
Barium	0.012 mg/l	0-0.012 mg/l	0.009 mg/l	2.0	2.0	no	Found in nature
Flouride	.071 mg/l	0-0.071 mg/l	.020 mg/l	4.0	1.0	no	Found in nature
sodium	19.0 mg/l	8.1-19.0 mg/l	10.80 mg/l	none	25 mg/l	no	Found in nature, chemical addition and road salt.
Haloacetic Acids	109.0 mg/l	0-109.0 mg/l	20.03 mg/l	64.0 mg/l	50 mg/l	no	Chlorine By Products
Synthetic and VOC:							
Atrazine	0.19 ppb	0-.19 ppb	N/A	3.0 ppb	0.0	No	Organic Chemical
Di(2ethylhexylph talate)	0.80 ppb	0-0.80 ppb	N/A	6.0 ppb	0.0	No	Organic Chemical
Hexacholorocycl epentadiene	0.2 ppb	0-0.2 ppb	N/A	50.0 ppb	0.0	No	Organic Chemical

The City of Leominster is dedicated preserving the quality and reliability of its drinking supplies. Along with the completion of the new treatment facilities, the department has aggressive flushing and water main replacement program. Further information can be obtained by contacting Mr. Matthew S. Marro at 534-7588 ext 517.